Serial No. 09/841,032 Page 2

1. (currently amended) A circuit board support rack for supporting a circuit board having first and second opposite edges, the support rack comprising:

-a frame;

- -a board engagement platform fixed with respect to the frame having an edge engagement member adapted for contact with respect to the first edge;
- -a board retention member element spaced from the engagement platform by a <u>first</u> distance, the board retention element having an edge retention member adapted for contact with respect to the second edge, the edge retention member spaced from the board retention element by a second distance and aligned with the edge engagement member;
- -a first adjustment mechanism coacting with the frame interconnected with respect to the board engagement platform and the board retention member and element, the first adjustment mechanism permitting adjustment of the first distance; and -a second adjustment mechanism on connected with respect to the board retention member element and the edge retention member, such the second adjustment mechanism being mounted for movement toward and away from the engagement platform while the distance remains substantially unchanged permitting adjustment of the second distance and maintaining the second distance after adjustment;

whereby the first and second adjustment mechanisms can be independently adjusted such that the edge engagement member and the edge retention member compress the circuit board by contacting the first and second edges, respectively.

2. (currently amended) The rack of claim 1 wherein:

-the frame includes plural openings for attaching the rack to a vibratory table; and
-the first adjustment mechanism includes apertures spaced from one another, the first
adjustment mechanism interconnecting the board engagement platform and the board
retention element by affixing the board retention element to at least one aperture,
thereby the apertures permitting the first distance to be adjusted in predetermined
increments.

- 3. (currently amended) The rack of claim 2 wherein:
- -the first distance is measured along a first axis; and
- -the apertures extend along a second axis substantially parallel to the first axis.
- 4. (currently amended) The rack of claim 3 wherein:
- -the board engagement platform includes edge engagement member is a linear engagement groove extending along a third axis; and
- -the third axis is substantially perpendicular to the first axis.
- 5. (currently amended) In combination, a printed circuit board having first and second opposite edges and a rack supporting the board, the rack comprising:
 - -a frame;
 - -a <u>board engagement</u> platform mounted with respect to the frame and engaging the first edge;
 - -a board retention member element spaced from the <u>board</u> engagement platform by a <u>first</u> distance;
 - -a first adjustment mechanism capable of adjusting the <u>first</u> distance coacting with the frame and the <u>board</u> retention <u>member element</u> and maintaining the <u>first</u> distance; and -a second adjustment mechanism on the <u>board</u> retention <u>member element</u> and engaging the second edge;

and wherein:

- -the platform and the second adjustment mechanism exert compressive force on the board by contacting the first and second opposite edges, respectively.
- 6. (currently amended) The combination of claim 5 wherein the second adjustment mechanism includes:
 - -a clamping screw threaded to the board retention member element; and
 - -a locating pin mounted to the clamping screw for relative movement with respect to such screw, the pin including a notch engaging the second edge of the printed circuit board.

- 7. (currently amended) The combination of claim 5 wherein:
- the <u>board</u> retention <u>member element</u> includes a plurality of second adjustment mechanisms,
- -each second adjustment mechanism has a respective clamping screw;
- -each clamping screw is threaded to the board retention member element; and
- -each clamping screw has a respective locating pin mounted thereto.
- 8. (original) The combination of claim 7 wherein:
- -the clamping screws are first, second and third clamping screws;
- -the locating pins are first, second and third locating pins mounted on the first, second and third clamping screws, respectively; and
- -each locating pin is rotationally movable with respect to the clamping screw on which it is mounted.
- 9. (original) The combination of claim 5 wherein:
- -the board has a substantially planar surface; and
- -the compressive force is exerted substantially parallel to the planar surface.
- 10. (original) The combination of claim 5 wherein:
- -the board has a substantially planar surface; and
- -the compressive force is exerted substantially coincident with the planar surface.
- 11-12. (canceled).
- 13. (currently amended) The combination support rack of claim 12 1 wherein:
- -the board retention member element has first and second pluralities of clamping screws threaded thereto; and
- -each clamping screw of the first plurality of clamping screws has a relatively-movable locating pin coupled thereto.

14. (currently amended) The combination support rack of claim 12 21 wherein:

Page 5

- -the board retention member element has first and second pluralities of clamping screws threaded thereto;
- -each clamping screw of the first plurality and of the second plurality of clamping screws has a locating pin coupled thereto;
- -the boards comprise first and second boards;
- -the first board is clamped between the platform and the first plurality of clamping screws; and
- -the second board is clamped between the platform and the second plurality of clamping screws.
- 15. (currently amended) The combination of claim 12 22 wherein:
- -the end panels are first and second end panels having, respectively, first and second rows of vertically-spaced-apart apertures;
- -first and second screws extend, respectively, through an aperture of the first and second rows and engage the board retention member element.
- 16. (currently amended) The combination of claim 15 wherein:
- -the platform and the board retention member are spaced apart by a first dimension;
- -the platform and the locating pins of the first plurality of clamping screws are spaced apart by a second dimension;
- -the first and second rows of apertures and the first and second screws comprise a <u>the</u> first adjustment mechanism whereby the first <u>dimension</u> <u>distance</u> may be selected in predetermined increments; and
- -the first plurality of clamping screws comprises a <u>the</u> second adjustment mechanism whereby the second <u>dimension</u> <u>distance</u> may be selected in a continuum.

17-20. (canceled).

Page 6 Serial No. 09/841,032

21. (new) A support rack for supporting circuit boards, each circuit board having first and second opposite edges defining a length, the support rack comprising:

- a board engagement platform having edge engagement members, each edge engagement member being adapted for contact with respect to the first edge of a respective circuit board;
- a board retention element being connected with respect to the engagement platform and spaced from the engagement platform by a first distance; the board retention element having edge retention members, each edge retention member being adapted for contact with respect to the second edge of the respective circuit board, each edge retention member spaced from the board retention element by a second distance and aligned with a respective edge engagement member;
- a first adjustment mechanism interconnected with respect to the board engagement platform and the board retention element, the first adjustment mechanism permitting adjustment of the first distance; and
- a plurality of second adjustment mechanisms, each second adjustment mechanism being connected with respect to the board retention element and the respective edge retention member, each second adjustment mechanism permitting adjustment of the respective second distance;

whereby the first and second distances can be independently adjusted so that the respective edge engagement members and edge retention members can compress circuit boards of different lengths by contacting the respective first and second edges.

22. (new) The support rack of claim 1 further comprising a frame including a pair of vertical, longitudinally-spaced end panels between which the board engagement platform and the board retention element are supported in spaced relationship to one another, and wherein the circuit boards are clamped therebetween.

Serial No. 09/841,032 Page 7

23. (new) The combination of claim 5 further including a vibratory table supporting the rack and the board, and wherein:

- -the table includes a mounting surface having a plurality of holes formed therein;
- -the rack includes a frame having plural openings formed therein; and
- -fasteners extend through the openings into the holes, thereby securing the rack and the boards to the table.
- 24. (new) The support rack of claim 21 wherein each edge engagement member is a linear engagement groove.
- 25. (new) The support rack of claim 24 wherein each second adjustment mechanism includes a clamping screw threaded to the board retention element and a locating pin mounted to the clamping screw for relative movement with respect to such screw, the pin including a notch acting as the edge engagement member to engage the second edge of each circuit board.
- 26. (new) The support rack of claim 21 wherein each second adjustment mechanism maintains the respective second distance after adjustment.